DECLARATION IN THE MATTER OF Moussouris v. Microsoft SUBMITTED BY: Ruth Gilgenbach, Ph. D.

April 2, 2018

- 1. I am a partner at Ashenfelter & Ashmore, LLP in Princeton, New Jersey. I received a PhD in economics from Southern Methodist University in 2012, a Master of Arts in economics from Southern Methodist University in 2008, and a B.A. in economics and political science from Agnes Scott College in 2006. I teach courses in law and economics at Rutgers University. My CV is attached to this declaration at Exhibit A.
- 2. I have been asked by Counsel for the Plaintiffs to review data provided by Microsoft and to provide a chart listing all male employees who share with each named plaintiff (1) the following characteristics: profession, discipline, age within three years, tenure within three years, and peer group¹, and (2) who either (a) received higher total compensation that the named plaintiff or (b) were promoted. These charts are attached to this declaration as Tables 1 and 2, respectively. For each Table, Panel A presents total compensation (including incentive payments, which are relevant only for Plaintiff Piermarini), and Panel B presents total compensation less incentive payments.
- 3. The data provided by Microsoft indicate that comparable men (or male employee-years) within the Engineering Profession received greater compensation or were promoted faster than Plaintiff Moussouris between 2012 and 2014.
- 4. The data provided by Microsoft indicate that comparable men (or comparable male employee-years) within the IT Operations Profession received greater compensation or were promoted faster than Plaintiff Muenchow between 2012 and 2016.

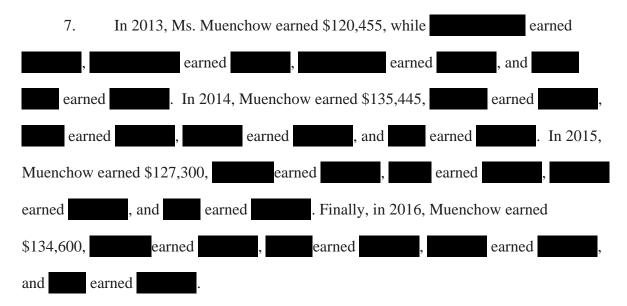
¹ I rely on the field "stock level group" in MS People to identify peer groups, since the field named "peer group" is only available in limited years, from the MRT database. Once an employee's profession is accounted for – as is the case here – stock level groups are identical to peer groups.

- 5. The data provided by Microsoft indicate that comparable men (or male employee-years) within the Solution Sales Profession received greater total compensation (inclusive of incentive payments) or were promoted faster than Plaintiff Piermarini between 2012 and 2016. These data also indicate that comparable men (or male employee-years) within the Solution Sales Profession received greater total compensation (less incentive payments) or were promoted faster than Plaintiff Piermarini between 2012 and 2016.
- 6. I have been asked by Counsel for the Plaintiffs to review data provided by Microsoft and to identify certain personnel data for particular male comparators. I understand that these individual comparators are listed in Plaintiffs' interrogatory responses and/or deposition testimony and Microsoft's Motion for Summary Judgment. Although the data provided to me by Microsoft were anonymized, I can nevertheless identify some of these comparators, provided that another employee reports to them. Since Microsoft has provided files that list both the names and personnel numbers of employees' "reports to" managers, I am able to match some names to their personnel number. ² I am further able to identify some comparators based on the information provided by Microsoft in the Declaration of Carolyn Lee. ³ The declaration provides information about comparators' Profession, Discipline, Standard Title, Supervisor, and Stock Level. For some comparators, enough information was provided for me to uniquely identify the comparator's personnel number in the MS People data Microsoft has provided. I also used the Lee Declaration to

² Specifically, I use the files MSFT_MOUSSOURIS_00121230.xlsx and MOUSSOURIS_00121231.xlsx. I search for comparators names in the field "Reports to Full Name" and, if found, I identify their personnel number in the corresponding field "Reports to Personnel Number." When available, information from the Lee Declaration was used to corroborate these data.

³ Declaration of Carolyn Lee in Support of Microsoft's Motion For Summary Judgement, March 15, 2018.

verify the match of names to personnel numbers from the previously mentioned Microsoft files. Table 3 lists, for each comparator-year observation where there is a pay difference adverse to the named Plaintiff (and for the Named Plaintiff to whom each is compared), surname and personnel number, stock level, peer group, months at Microsoft, age in years, total compensation, a variable that indicates whether or not the employee was promoted, performance metrics, profession, discipline, standard title, the city and state where the employee works, and an indicator for the employee's gender.⁴



⁴ Note that data for compensation year 2010 is incomplete, since the earliest dates in the MS People data is January 1, 2010. I therefore calculate total compensation in compensation year 2010 using the first observed salary of calendar year 2010, all stock awards through August 28, 2010, and all bonuses and incentive payments through August 31, 2010. Also, note that plaintiff Moussouris is listed as having profession "Unassigned" and discipline "Unassigned" at the start of 2010, so in Table 3, I replace her profession, discipline, and standard title with the first observation for which her profession is not "Unassigned."

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⁵ Microsoft had different scales for performance metrics. In 2014, one was the highest score, while is 2015, five was the highest score.

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Exhibit A

Ruth Gilgenbach

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Professional Experience

Partner Economist Ashenfelter & Ashmore January 2105- Present September 2013-Present Princeton, New Jersey

Perform economic research and empirical analysis for litigation, arbitration, and mediation. Provide analysis and support for a wide variety of topics, including: discrimination (in hiring, promotions, and compensation); price fixing; wage fixing; anticompetitive behavior; merger review; international trade (antidumping and safeguard) proceedings; auction theory; network neutrality regulation; and international arbitration.

Economist Texas Attorney General, Antitrust Section

May 2012-September 2013 Austin, Texas

Responsible for providing theoretical and empirical analysis in support of the Texas Attorney General. Provided analysis for a wide range of antitrust issues, including merger review, monopolization, anticompetitive conduct, and price-fixing cases. Additionally provided analysis of impact for consumer protection and environmental protection cases. Worked as part of large multi-state groups in drafting and responding to Daubert motions, case briefs, and other legal filings. Assisted in preparation for and attended multiple expert depositions. Participated in multiple mediation proceedings with a federal judge.

Teaching Experience

Lecturer, Rutgers University, New Brunswick, Department of Economics Law & Economics. Fall 2015- Present

Lecturer, Southern Methodist University, Department of Economics Price Theory. Fall 2009, Fall 2010, Spring 2011, Fall 2011

Education

Southern Methodist University, Dallas Texas. Ph.D. in Economics, 2012. M.A. in Economics, 2008. Doctoral Dissertation: *Market Segmentation and Market Frictions*

Agnes Scott College, Atlanta, Georgia. B.A. in Economics and Political Science, 2006. *Magna cum laude.*

Fields of Interest

Industrial Organization, Microeconomic Theory, Applied Microeconomics, International Economics, Labor Economics
Ruth Gilgenbach
February 2018

Published Papers

Can a Decline in Search Cost Increase Prices? *Canadian Journal of Economics*, Volume 48, No. 4. November 2015.

Engaging an Economist in an Antitrust Matter. *Practical Law The Journal*. Volume 7, Issue 3. April 2015.

Working Papers

On Price Competition with Captive Segments and Costly Search. Working paper.

A Note on Targeted Advertising, Consumer Search, and Overlapping Market Segments. Working paper.

Presentations

Eastern Economic Association Conference, Boston, Massachusetts. 2012 Southern Economics Association Conference, Washington D.C. 2011 Southern Methodist University, Department of Economics. 2011 Southern Methodist University, Graduate Research Day. 2011 Southern Economics Association Conference, Atlanta, Georgia. 2010

Honors, Awards, and Professional Associations

Dean's Graduate Dissertation Fellowship, Southern Methodist University, 2011-2012 Summerfield G. Roberts Research Fellowship, 2010 Dean's Award, Graduate Research Day, Southern Methodist University, 2010 Phi Beta Kappa, inducted 2006 Wall Street Journal Student Achievement Award, 2006 Omicron Delta Epsilon, inducted 2005 American Economic Association Canadian Economic Association American Bar Association (Associate)

Ruth Gilgenbach February 2018